

Title (en)

CONTACT MAKING FEELER HEAD FOR COORDINATE MEASURING MACHINE USING A PHOTOLUMINESCENT MATERIAL FOR MONITORING THE FEELER DISPLACEMENT

Title (de)

TASTKOPF FÜR KOORDINATENMESSGERÄT, DER EIN PHOTOLUMINESZENZMATERIAL ZUR ÜBERWACHUNG DER TASTERVERSCHIEBUNG VERWENDET

Title (fr)

TÊTE DE PALPAGE POUR MACHINE DE MESURE DE COORDONNÉES UTILISANT UN MATÉRIAUX PHOTOLUMINESCENT POUR MESURER LE DÉPLACEMENT DU PALPEUR

Publication

EP 3415862 B1 20220302 (EN)

Application

EP 18178083 A 20180615

Priority

US 201715625879 A 20170616

Abstract (en)

[origin: EP3415862A1] A scanning probe responsive in three axes is provided for use in a coordinate measuring machine. The scanning probe includes a frame, a stylus suspension portion and a stylus position detection portion. The stylus position detection portion includes a light source that is operated to radiate source light toward a position indicating element that is fixed relative to the stylus coupling portion. The position indicating element includes a position indicating emitter having an emitter material (e.g., phosphor) that inputs and absorbs the light from the light source and responds by outputting excitation light. In various implementations, the excitation light is directed as at least one of axial measurement light along an axial measurement spot path to form an axial measurement spot on an axial position sensitive detector and/or rotary measurement light along a rotary measurement spot path to form a rotary measurement spot on a rotary position sensitive detector.

IPC 8 full level

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CPC (source: CN EP US)

G01B 5/008 (2013.01 - CN); **G01B 5/012** (2013.01 - EP US); **G01B 11/005** (2013.01 - CN); **G01B 11/007** (2013.01 - CN EP US)

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